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EXAMINER

BROWN, RUEBEN M

ART UNIT

PAPER NUMBER

2611

DATE MAILED: 12/19/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
**09/002,584**

Applicant(s)  
**Wugofski**

Examiner  
**Reuben Brown**

Art Unit  
**2611**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Sep 28, 2001
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6, 9-13, 15-19, 21-23, 28-32, 35, 36, 39, 40, and 43-45 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9-13, 15-19, 21-23, 28-32, 35, 36, 39, 40, and 43-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 20) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 7, 9-23, 25-27, 29-30, 32-34, 36-38 & 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young, (U.S. Pat # 5,353,121), in view of Ohga, (U.S. Pat # 5,465,385) and Metz, (U.S. pat # 5,666,293).

Considering claim 1, the amended claimed computerized method for scheduled caching of in-band data in a channel comprising a real-time scheduling process; and a user initiated scheduling process for determining a scheduled time and channel for in-band data is met by Young (Fig. 2; Fig. 4; Fig. 22A; col .4, lines 9-40; col. 18, lines 20-37). The above cited portions

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of Young discloses a system wherein a subscriber views an EPG containing a time, date & channel schedule of future programming broadcasts. The subscriber is enabled to select a program to be received and/or recorded by the user's data terminal at a particular time, which reads on invoking the real-time scheduling process to schedule execution of a caching process at approximately the scheduled time.

Young teaches that the data terminal of the subscriber compares the current time with the start time of the reserved program and automatically tunes to the proper channel when the reserved time is the same as the current time, (col. 4, lines 9-35; col. 21, lines 1-13), which is therefore executed regardless of the presence of the viewer.

Examiner points out that the claimed limitations reciting "in-band data broadcast" is broad enough to read on the system described in Young, wherein the in-data may be broadcast over a conventional CATV system utilizing a conventional frequency channel, such as a 6 MHZ channel (col. 23, lines 7-15). "In-band" data broadcasts include broadcasts that utilize any or all portions of a frequency channel.

Further amended claim 1, includes the limitation, previously recited in canceled claim 8, of wherein the caching process is operable for "powering on the tuning circuitry", which is not specifically taught by Young. Young teaches that when the system clock matches a scheduled

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time of a user selected recording, the cable decoder is tuned to the proper channel and a power-on and record commands are transmitted to the recording device. Even though Young does not explicitly state that the tuner may also be powered-on, such a feature was well known in the art at the time the invention was made. For example, Ohga (col. 5, lines 5-10) teaches that when a present time clock corresponds with the start time of a user desired broadcast, at that instant the 'CPU 25 automatically turns on the power of the TV receiver 3', which reads on the claimed "process... operable for powering on a tuner circuitry". It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Young with the well known technique of automatic power-on of a tuner, as taught by Ohga in order for the subscriber to receive requested programming at the appropriate time, at least for the desirable improvement of obviating the need for the subscriber to remember the broadcast start times of desired programming and to be available at such times.

Amended claim 1, adds the limitation, previously recited in claim 7, " wherein the in-band data comprises EPG data". Even though EPG data is sent to the user in Young, the reference does not teach that the user may specifically request or order the EPG data. However, Metz is directed to a system wherein software applications, (Abstract; col. 20, lines 35-45) such as an operating system are downloaded to a user's terminal. Metz further discloses that the downloading procedure may either operate in an automatic or manual mode. In the manual mode, the subscriber is enabled to choose when the instant software application is downloaded, at least

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by manually controlling the process. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Young with the disclosure of Metz, enabling the user to initiate a download of software application, at least for the improvement of providing a more customized process for downloading the applications.

Finally, the claim recites that in the scheduling process, the user determines a schedule, including time and channel of the caching process. Thus the combination of Young and Metz, suggests to one of ordinary skill in the art, for the user to schedule download operations of EPG data. This is true since the EPG data reads on a particular software application, as discussed by Metz. Moreover, at the time the invention was made, it was notoriously well known in the art of VOD programming for user to order a particular broadcast program, at a particular time, over a particular channel, thereby granting the subscriber as much convenience as possible, in having the delivery of the data when the subscriber is most like to view the downloaded program.

Again the VOD program is comparable to the EPG of the present claim, since both the EPG and broadcast programs may be delivered and cached at the user's location for the benefit for faster retrieval when the user is ready to interact with the programming. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Young with the known technique of ordering a program at a specific time, at least for the desirable improvement of

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providing the user with more control of the process.

Considering claim 2, the claimed feature of retrieving the scheduled time & and channel from a source reads on the standard operation of an EPG and is disclosed in Young, (col. 5, lines 60-68; col. 22, lines 21-25),

Considering claims 3 & 5, Young teaches that an EPG may be transmitted over a conventional channel or within the VBI of a channel, col. 18, lines 41-46.

Considering claims 4, 13, 17 & 23, Young teaches that programming and control information may be transmitted over a channel, which necessarily requires a decoder such as a VBI decoder to process the information, (col. 18, lines 47-55).

Considering amended claim 9, claimed method steps of a scheduling process which corresponds with subject matter mentioned above in the rejection of claim 1, are likewise rejected. Regarding the amended claimed step of a determination to receive in-band data being initiated by the user, Young teaches that the user is enabled to choose to receive particular broadcasts (col. 19, lines 14-28; col. 21, lines 1-8). The additional claimed feature of storing in-band data on mass storage, reads on storage of data in a VCR device and RAM, as taught by Young (col. 12, lines 35-51; col. 18, lines 47-65; col. 19, lines 1-10).

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Considering claim 10, the claimed step of displaying a plurality of schedules to user for selection, reads on Young wherein the user may view a plurality of different schedules of broadcasts at least according to different categories, (Fig. 4; Fig. 7; Fig. 16). Young furthermore teaches that the time & channel of broadcast is determined by a user's selection, (col. 19, lines 1-5).

Considering claims 11, 19 & 22, Young teaches determining a source for and retrieving an EPG from the source, in that the tuner is tuned to a channel to received updates for the EPG (col. 18, lines 37-55).

Considering claim 12, the source for the schedule in Young is in-band data broadcasts.

Considering amended claim 15, claimed steps of a scheduling process which corresponds with subject matter mentioned above in the rejection of claim 9, are likewise rejected. Regarding the additional limitation of storing the recited steps on a computer readable medium having computer executable-instructions stored thereon for performing the steps, Young discloses storing instructions in memory, which are controlled by the CPU, (col. 118, lines 49-52; col. 19, lines 32-41; col. 21, lines 49-68).



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Considering amended claim 16, the claimed elements of a digital processing system corresponds with subject matter mentioned above in the rejection of claim 1, and are likewise rejected.

Considering claim 18, as discussed above in the rejection of claim 10, Young provides a plurality of scheduling options for receiving broadcast programming.

Considering amended claim 21, the claimed elements of a computerized system for scheduled caching corresponds with subject matter mentioned above in the rejection of claim 1, and are likewise rejected.

Considering amended claim 25, the claimed elements of an information handling system corresponds with subject matter mentioned above in the rejection of claim 1, and are likewise rejected.

Considering claim 29, the instant features are met by Young, (col. 19, lines 1-14; col. 21, lines 1-22).

Considering claim 30, the information is transmitted and received over a CATV channel.

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Considering claim 31, the caching process powering on the tuner reads on the combination of Young & Ohga, as discussed above with respect to claim 1.

Considering amended claim 32, the claimed performance of steps comprised on a computer readable medium corresponds with subject matter mentioned above in the rejection of claim 9, and are likewise rejected.

Considering amended claim 36, the claimed method for handling information comprising steps corresponds with subject matter mentioned above in the rejection of claim 1, and are likewise rejected.

Considering amended claim 40, the claimed information handling system corresponds with subject matter mentioned above in the rejection of claim 1, and are likewise rejected.

Considering new claim 45, the claimed feature of executing multiple executions of the caching process is broad enough to read on Young & Ohga, since the user is enabled to choose and execute multiple broadcast programs.

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3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Young & Ohga, in view of Yoshinobu (U.S. Pat # 5,686,954).

Considering claim 6, Young teaches that the system is also applicable for satellite communication, col. 23, lines 8-11, but does not specifically discuss the use of digital satellite technology. However Yoshinobu discusses the benefits of utilizing digital satellite technology, (col. 7, lines 62-67 thru col. 8, lines 1-7). It would have been obvious for one ordinary skill in the art at the time the invention was made, to modify Young with the well known feature of digital satellite communication , at least for the desirable improvement of a more effective transmission scheme as taught by Yoshinobu.

4. Claims 28, 35, 39 & 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young & Ohga, in view of Lajoie (U.S. Pat # 5,850,218).

Considering claims 28, 35, 39 & 43, Young discusses the transmission and reception of in-band data, including at least EPG data but does not discuss Internet data. However, Lajoie discloses the desirable benefits of transmitting Internet related data, i.e URL data (col. 17, lines 30-67 thru col. 18, lines 1-10). It would have been obvious for one of ordinary skill in the art at

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the time the invention was made, to modify Young to include Internet related data, for the known improvement of offering more services to the instant subscriber, as taught by Lajoie.

5. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Young & Ohga as applied to claim 7 above, and further in view of Klosterman, (U.S. Pat # 5,550,576).

Considering claim 44, Young nor Ohga teach EPG data arriving at the user's set-top box STB, from multiple sources. Nevertheless, Klosterman discloses a technique for merging TV schedule information received from multiple sources, at a user's location, see Abstract & col. 2, lines 61-67 thru col. 3, lines 1-25. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify the combination of Young & Ohga with the technique of receiving and combining EPG data from multiple sources, at a user's STB for the desirable advantage of enabling a user to more efficiently interact with multiple sources of TV programming such as cable, satellite or antenna broadcast, and by coordinating program schedule information for the instant multiple sources, as taught by Klosterman.

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***Response to Arguments***

6. Applicant's arguments with respect to claims 1, 9, 15, 16, 21, 25, 32, 36 & 40 have been considered but are moot in view of the new ground(s) of rejection. Examiner relies upon Metz to teach the presently claimed feature of a user initiating a downloading process.

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**Any response to this action should be mailed to:**

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reuben M. Brown whose telephone number is (703) 305-2399. The examiner can normally be reached on Monday thru Friday from 830am to 430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380. The fax phone number for this Group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.



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